b.) Amendment to the Claims:

1. (Currently Amended) A <u>Hsp90</u> heat shock protein 90 (Hsp90) family protein inhibitor comprising, as an active ingredient, a benzoyl compound represented by general formula (I):

$$R^{4}$$
 R^{5}
 R^{6}
 $(CH_{2})_{n}R^{1}$

[wherein

n represents an integer of 0 to 10;

R¹ represents a hydrogen atom, hydroxy, cyano, carboxy, nitro, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted lower alkanoyloxy, substituted or unsubstituted heterocyclic alkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted heterocyclic group, CONR⁷R⁸ (wherein R⁷ and R⁸, which may be the same or different, each independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted aryl, a substituted or

unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, substituted or unsubstituted heterocyclic alkyl, or substituted or unsubstituted aroyl, or R^7 and R^8 form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom) or NR^9R^{10} (wherein R^9 and R^{10} have the same meanings as the above R^7 and R^8 , respectively);

R² represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group;

R³ and R⁵, which may be the same or different, each independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aroyl; and

R⁴ and R⁶, which may be the same or different, each independently represent a hydrogen atom, hydroxy, halogen, cyano, nitro, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, amino, lower alkylamino, di-lower alkylamino, carboxy, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted aryloxy, substituted or unsubstituted aryloxy, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group,

substituted or unsubstituted aralkyl, or substituted or unsubstituted heterocyclic alkyl] or alkyl], or

a prodrug thereof, or a pharmaceutically acceptable salt of said benzoyl compound or said prodrug.

2. (Currently Amended) An Hsp90 family protein inhibitor comprising, as an active ingredient, a benzoyl compound represented by general formula (I):

(wherein n, R^1 , R^2 , R^3 , R^4 , R^5 and R^6 each have the same meanings as defined above)
[wherein

n represents an integer of 0 to 10;

R¹ represents a hydrogen atom, hydroxy, cyano, carboxy, nitro, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted or unsubstituted lower alkoxy, substituted or unsubstituted lower alkoxycarbonyl,

substituted or unsubstituted lower alkanoyloxy, substituted or unsubstituted heterocyclic alkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted heterocyclic group, CONR⁷R⁸ (wherein R⁷ and R⁸ independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, substituted or unsubstituted heterocyclic alkyl, or substituted or unsubstituted aralkyl, substituted or unsubstituted or unsubstituted heterocyclic alkyl, or substituted or unsubstituted aroyl, or R⁷ and R⁸ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom) or NR⁹R¹⁰ (wherein R⁹ and R¹⁰ have the same meanings as the above R⁷ and R⁸, respectively);

R² represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group;

R³ and R⁵ independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aroyl; and

R⁴ and R⁶ independently represent a hydrogen atom, hydroxy, halogen, cyano, nitro, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower

alkoxy, substituted or unsubstituted cycloalkyl, amino, lower alkylamino, di-lower alkylamino, carboxy, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted aryloxy, substituted or unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, or substituted or unsubstituted heterocyclic alkyl],

or a pharmaceutically acceptable salt thereof.

- 3. (Currently Amended) The Hsp90 family protein inhibitor according to elaim 1 or 2, claim 2, wherein R¹ is a hydrogen atom, hydroxy, cyano, carboxy, nitro, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted lower alkanoyloxy, substituted or unsubstituted heterocyclic alkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylsulfonyl, CONR⁷R⁸ (wherein R⁷ and R⁸ each have the same meanings as defined above) or NR⁹R¹⁰ (wherein R⁹ and R¹⁰ each have the
- 4. (Currently Amended) The Hsp90 family protein inhibitor according to claim 1 or 2, claim 2, wherein R¹ is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkoxycarbonyl, substituted or

unsubstituted heterocyclic alkyl, substituted or unsubstituted aryl, CONR⁷R⁸ (wherein R⁷ and R⁸ each have the same meanings as defined above) or NR⁹R¹⁰ (wherein R⁹ and R¹⁰ each have the same meanings as defined above).

- 5. (Currently Amended) The Hsp90 family protein inhibitor according to claim 1 or 2, claim 2, wherein R¹ is CONR⁷R⁸ (wherein R⁷-and R⁸-each have the same meanings as defined above).
- 6. (Currently Amended) The Hsp90 family protein inhibitor according to any one of claim 1 to 5, claims 2 to 5, wherein R² is substituted or unsubstituted aryll or a substituted or unsubstituted aromatic heterocyclic group.
- 7. (Currently Amended) The Hsp90 family protein inhibitor according to any one of claim 1 to 6, claim 6, wherein R⁴ is a hydrogen atom, hydroxy or halogen.
- 8. (Currently Amended) The Hsp90 family protein inhibitor according to any one of claim 1 to 7, claim 7, wherein R³ and R⁵, which may be the same or different, each are a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or

unsubstituted lower alkenyl, substituted or unsubstituted lower alkanoyl, or substituted or unsubstituted aroyl.

- 9. (Currently Amended) The Hsp90 family protein inhibitor according to any one of claim 1 to 6, claim 6, wherein R³, R⁴ and R⁵ each are a hydrogen atom.
- 10. (Currently Amended) The Hsp90 family protein inhibitor according to any one of claim 1 to 9, claim 9, wherein R⁶ is a hydrogen atom, lower alkyl, halogen or aryl.
- 11. (Currently Amended) A benzoyl compound represented by general formula (IA):

[wherein

nA represents an integer of 1 to 5;

R^{1A} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted heterocyclic alkyl, substituted or unsubstituted aryl, CONR⁷R⁸ (wherein R⁷ and R⁸ each have the same meanings as defined above) or NR⁹R¹⁰ (wherein R⁹ and R¹⁰ each have the same meanings as defined above) (wherein R⁷ and R⁸ independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, substituted or unsubstituted heterocyclic alkyl, or substituted or unsubstituted aroyl, or R⁷ and R⁸ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom) or NR⁹R¹⁰ (wherein R⁹ and R¹⁰ have the same meanings as the above R⁷ and R⁸, respectively);

 $R^{2A} \ represents \ substituted \ or \ unsubstituted \ aryl \ or \ a \ substituted \ or \ unsubstituted \ aromatic \ heterocyclic \ group;$

R^{3A} and R^{5A}, which may be the same or different, each independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aroyl;

R^{4A} represents a hydrogen atom, hydroxy or halogen; and

R^{6A} represents a hydrogen atom, halogen, cyano, nitro, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkylamino, carboxy, substituted cycloalkyl, amino, lower alkylamino, di-lower alkylamino, carboxy, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted aryloxy, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, or substituted or unsubstituted heterocyclic alkyl; provided that:

 $\mbox{(i) when } R^{3A} \mbox{ and } R^{5A} \mbox{ each are methyl, } R^{4A} \mbox{ and } R^{6A} \mbox{ each are a hydrogen}$ atom, and

$$-(CH2)nAR1A is$$

(a) methoxycarbonylmethyl,

R^{2A} is not a group selected from the group consisting of 2,4,6-trimethoxy-5-methoxycarbonyl-3-nitrophenyl, 3-cyano-2,4,6-trimethoxyphenyl, 5-cyano-2-ethoxy-4,6-dimethoxy-3-nitrophenyl, 2,6-dimethoxyphenyl, 2-chloro-6-methoxyphenyl and 2-chloro-4,6-dimethoxy-5-methoxycarbonyl-3-nitrophenyl,

(b) ethoxycarbonylmethyl;

 R^{2A} is not 2,4,6-trimethoxy-3-methoxycarbonyl-phenyl, and

(c) N,N-dimethylaminomethyl,

R^{2A} is not phenyl;

 $\mbox{(ii) when } R^{3A}, R^{4A}, R^{5A} \mbox{ and } R^{6A} \mbox{ each are a hydrogen atom, and } \mbox{(CH$_2$)}_{nA} R^{1A} \mbox{ is}$

(a) 2-(acetoxymethyl)heptyl, 3-oxopentyl or pentyl,

 $R^{\textstyle 2A} \ is \ not \ 6-hydroxy-4-methoxy-3-methoxycarbonyl-2-pentylphenyl,$

(b) 3-oxopentyl,

R^{2A} is not a group selected from the group consisting of 3-benzyloxycarbonyl-6-hydroxy-4-methoxy-2-pentylphenyl and 3-carboxy-6-hydroxy-4-methoxy-2-pentylphenyl, and (c) n-propyl,

R^{2A} is not 2,4-dihydroxy-6-[(4-hydroxy-2-oxopyran-6-yl)methyl]phenyl;

 ${\rm (iii) \ when \ } R^{3A} \ {\rm and \ } R^{4A} \ {\rm each \ are \ a \ hydrogen \ atom, \ } R^{5A} \ {\rm is \ methyl, \ } R^{6A} \ {\rm is}$ ${\rm methoxycarbonyl, \ and \ } {\rm -(CH_2)}_{nA} R^{1A} \ {\rm is \ pentyl;}$

R^{2A} is not a group selected from the group consisting of 6-[2-(acetoxymethyl)heptyl]-2,4-dihydroxyphenyl, 2,4-dihydroxy-6-pentylphenyl and 2,4-dihydroxy-6-(3-oxopentyl)phenyl;

 ${\rm (iv)\ when\ }R^{3A}\ {\rm and\ }R^{5A}\ {\rm each\ are\ benzyl,}\ R^{4A}\ {\rm and}\ R^{6A}\ {\rm each\ are\ a}$ hydrogen atom, and -(CH2)_{nA}R^{1A}\ is\ 3-oxopentyl,

R^{2A} is not a group selected from the group consisting of 6-benzyloxy-4-methoxy-3-methoxycarbonyl-2-pentylphenyl and 6-benzyloxy-3-benzyloxycarbonyl-4-methoxy-2-pentylphenyl;

 $\label{eq:charge_eq} \mbox{(v) when R^{3A} is benzyl, R^{4A} is a hydrogen atom, R^{5A} is methyl, - $$ $(CH_2)_{nA}R^{1A}$ is pentyl, and R^{6A} is methoxycarbonyl or benzyloxycarbonyl, $$ R^{2A} is not 2,4-bis(benzyloxy)-6-(3-oxopentyl)-phenyl; $$}$

 $\mbox{(vi) when } R^{3A} \mbox{ and } R^{4A} \mbox{ each are a hydrogen atom, } R^{5A} \mbox{ is methyl, -}$ $\mbox{(CH}_2)_{nA} R^{1A} \mbox{ is pentyl, and } R^{6A} \mbox{ is carboxy or benzyloxycarbonyl,}$

 R^{2A} is not 2,4-dihydroxy-6-(3-oxopentyl)phenyl; and

 $\mbox{(vii) when } R^{3A}, R^{4A} \mbox{ and } R^{6A} \mbox{ each are a hydrogen atom, } R^{5A} \mbox{ is n-propyl},$ and -(CH2) $_{nA}R^{1A}$ is 5-(1,1-dimethylpropyl)-4-(2-hydrobenzotriazol-2-yl)-2-hydroxyphenylmethyl,

 R^{2A} is not phenyl]-phenyl],

or a pharmaceutically acceptable salt thereof.

12. (Original) The benzoyl compound according to claim 11, wherein R^{2A} is a substituted or unsubstituted aromatic heterocyclic group, substituted aryl having 1 to 3 substituents, or aryl, or a pharmaceutically acceptable salt thereof.

- or 12, claim 12, wherein R^{3A} and R^{5A}, which may be the same or different, each are independently a hydrogen atom, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted aroyl, or substituted or unsubstituted lower alkenyl, or a pharmaceutically acceptable salt thereof.
- or 12, claim 12, wherein R^{3A}, R^{4A} and R^{5A} each are a hydrogen atom, or a pharmaceutically acceptable salt thereof.
- of elaim claims 11 to 14, wherein R^{1A} is CONR⁷R⁸ (wherein R⁷ and R⁸ each have the same meanings as defined above), or a pharmaceutically acceptable salt thereof.
- of claim 11 to 15, claims 11 to 14, wherein R^{6A} is a hydrogen atom, lower alkyl, halogen or aryl, or a pharmaceutically acceptable salt thereof.

- 17. (Currently Amended) A pharmaceutical composition comprising, as an active ingredient, the benzoyl compound according to any one of claim 11 to 16 claim

 16 or a prodrug thereof, or a pharmaceutically acceptable salt of said benzoyl compound or said prodrug, together with a pharmaceutically acceptable carrier.
- 18. (Currently Amended) A pharmaceutical composition comprising, as an active ingredient, a prodrug of the benzoyl compound according to any one of claim 11 to 16 claim 16 or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier.
- 19. (Currently Amended) <u>A pharmaceutical composition An Hsp90</u> family protein inhibitor comprising, as an active ingredient, the benzoyl compound according to any one of claim 11 to 16 or a prodrug thereof claims 11 to 14, or a pharmaceutically acceptable salt of said benzoyl compound or said prodrug, together with a pharmaceutically acceptable carrier.
- 20. (Currently Amended) <u>A pharmaceutical composition</u> An-Hsp90 family protein inhibitor comprising, as an active ingredient, <u>a prodrug of</u> the benzoyl compound according to any one of claim 11 to 16 claims 11 to 14 or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier.

Claims 21-24 (Cancelled).

25. (Currently Amended) A method of inhibiting a Hsp90 heat-shock protein 90 (Hsp90) family protein, which comprises administering an effective amount of a benzoyl compound represented by general formula (I):

$$R^{4}$$
 R^{5}
 R^{6}
 $(CH_{2})_{n}R^{1}$

(wherein n, R¹, R², R³, R⁴, R⁵ and R⁶ each have the same meanings as defined above)
[wherein

n represents an integer of 0 to 10;

R¹ represents a hydrogen atom, hydroxy, cyano, carboxy, nitro, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkoxycarbonyl, substituted or unsubstituted lower alkanoyloxy, substituted or unsubstituted heterocyclic alkyl, substituted or unsubstituted aryl, substituted or unsubstituted arylsulfonyl, a

substituted or unsubstituted heterocyclic group, CONR⁷R⁸ (wherein R⁷ and R⁸ independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted or unsubstituted lower alkanoyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, substituted or unsubstituted heterocyclic alkyl, or substituted or unsubstituted aralkyl, substituted or unsubstituted or unsubstituted heterocyclic alkyl, or substituted or unsubstituted aroyl, or R⁷ and R⁸ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom) or NR⁹R¹⁰ (wherein R⁹ and R¹⁰ have the same meanings as the above R⁷ and R⁸, respectively);

R² represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group;

R³ and R⁵ independently represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aroyl; and

R⁴ and R⁶ independently represent a hydrogen atom, hydroxy, halogen, cyano, nitro, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, amino, lower alkylamino, di-lower alkylamino, carboxy, substituted or unsubstituted lower alkoxycarbonyl, substituted or

unsubstituted lower alkanoyl, substituted or unsubstituted aryloxy, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted aralkyl, or substituted or unsubstituted heterocyclic alkyl], or a prodrug thereof, or a pharmaceutically acceptable salt of said benzoyl compound or said prodrug.

- 26. (Currently Amended) A method of treating a disease associated with an Hsp90 family protein or a Hsp90 client protein to which an Hsp90 family protein binds (Hsp90 client protein), which comprises administering an effective amount of the benzoyl compound according to any one of claim 11 to 16 claims 11 to 14 or a prodrug thereof, or a pharmaceutically acceptable salt of said benzoyl compound or said prodrug.
- 27. (Currently Amended) A method of treating malignant tumors, which comprises administering an effective amount of the benzoyl compound according to any one of claim 11 to 16 claims 11 to 14 or a prodrug thereof, or a pharmaceutically acceptable salt of said benzoyl compound or said prodrug.

Claims 28-31 (Cancelled).